Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A method for ~~providing a subnet~~servicing a VLAN by an access point, comprising:

storing a table associating ~~a subnet with~~ a broadcast key with a VLAN;

receiving a request for access to a network from a wireless station;

authenticating the wireless station with an authentication server;

receiving data from the authentication server with a VLAN identifier for the wireless station;

accessing the table to determine an appropriate ~~subnet~~broadcast key for the VLAN identifier; and

transmitting the appropriate broadcast key ~~associated with the appropriate subnet~~ to the wireless station.

2. (Cancelled).

3. (Currently Amended): The method of claim 1 further comprising the step of [[a]] using a separate broadcast key associated with each VLAN to encrypt the data.

4. (Cancelled).

5. (Currently Amended): The method of claim [[4]]1 wherein the wireless ~~LAN~~ station operates in accordance with the IEEE 802.11 standard.

6. (Original): The method of claim 1 wherein the subnet comprises a VLAN.

7. (Currently Amended): The method of claim 6 further comprising a step of tagging data to determine to which ~~subnet~~ VLAN the data belongs.

8. (Currently Amended): The method of claim 1 wherein the ~~subnet~~ VLAN comprises a mobile IP subnet.

9. (Currently Amended): The method of claim 8 further comprising a step of tagging data to determine to which ~~subnet~~ VLAN the data belongs.

10. (Currently Amended): An ~~subnet~~ access point, comprising:

means for storing a table associating a ~~subnet with a~~ broadcast key with a VLAN;

means for receiving a request for access to a network from a wireless station;

means for authenticating the wireless station with an authentication server;

means for receiving data from the authentication server with a VLAN identifier for the wireless station;

means for accessing the table to determine an appropriate ~~subnet~~broadcast key for the VLAN identifier; and

means for transmitting the appropriate broadcast key ~~associated with the appropriate subnet~~ to the wireless station.

11. (Cancelled)

12. (Currently Amended): The subnet of claim 10 further comprising a separate broadcast key associated with each VLAN to encrypt ~~the~~ data.

13. (Cancelled)

14. (Currently Amended): The ~~subnet~~ VLAN of claim [[13]]10 wherein the wireless ~~LAN~~ station operates in accordance with the IEEE 802.11 standard.

15. (Cancelled)

16. (Currently Amended): The subnet of claim [[15]]10 further comprising a tag for data to determine to which subnet the data belongs.

17. (Currently Amended): The subnet of claim 10 wherein the ~~subnet~~ VLAN comprises a mobile IP subnet.

18. (Original): The subnet of claim 17 further comprising a tag for data to determine to which subnet the data belongs.

19. (New): A method according to claim 1, further comprising:
receiving a session key from the authentication server;
sending the session key to the wireless station; and
encrypting the appropriate broadcast key with the session key for the wireless station.

20. (New): An access point according to claim 10, further comprising:
means for receiving a session key from the authentication server;
means for sending the session key to the wireless station; and
means for encrypting the appropriate broadcast key with the session key for the wireless station.

21. (New): A wireless access point configured to send and receive wireless signals from a wireless station and responsive to an association request from the wireless station to authenticate the wireless station with an authentication server, comprising:
a lookup table containing broadcast key values corresponding to VLAN identifiers;
wherein the access point is responsive to receiving a VLAN identifier for the wireless station to ascertain an appropriate broadcast key corresponding to the received VLAN identifier via the lookup table; and
wherein the access point transmits the appropriate broadcast key to the wireless station.

22. (New) An access point according to claim 21, further comprising the access point being configured to be responsive to receiving a session key from the authentication server for the wireless station to send the session key to the wireless station and to encrypt the appropriate broadcast key with the session key for the wireless station before sending the appropriate broadcast key to the wireless station.